A Native Dream

Bob Agee and Doyle Martin

Editor's Note: Good range management can occur on small areas as well as on thousands of acres. The testimony of Bob Agee bears out this hypothesis very well. Raymondville and Texas County are located in southern Missouri in the heart of the Ozark Mountains. Agee received "Rangeman of the Year" award in 1978 from the Southern Section, SRM.

As I rounded the corner and headed the combine up the east side of the field heat waves shimmered above the waving grain. Dust and insects rose from the combine header as the golden grain poured into the bin. My thoughts were focused on the price of grain and the hopes that the gentle breeze would bring rain as soon as the field was harvested. I was awakened from my reverie as I noticed the large clump of native grass growing tall and green in the midsummer heat. It was nestled between the fence and a large boulder that had protected it from the plow for many years. I had seen it numerous times before and now, I wondered, why shouldn't this be growing in full stands in a few fields to round out my pasture program. My father had told me about large areas of this grass in Texas County when the country was settled. How it reached the shoulders of a man on horseback and how they would cut it for hay in the semiopen woodland. My fields of fescue, orchardgrass, and other cool-season grasses were nearly dormant now and looked parched from the heat, but the native grass appeared to thrive. Certainly good quality forage for the next 2 months would put additional weight on my feeder calves to be sold in the fall. Would this fit into my program, my thoughts continued.

I'm Bob Agee a farmer at Raymondville, Mo., and those thoughts came during mid July in the 1960's. The combine is idle now, except for an occasional harvest of grass seed, and the boulder has been removed with production pushed to the fence line, destroying the clump of grass.

Yet the thoughts of it continued to haunt me, where could I find information on growing this kind of grass? Attempts were frustrating. Finally in late 1970 the pieces of the puzzle began to fit together. Doyle Martin, District Conservationist with the Soil Conservation Service, approached me with the idea of seeding some switchgrass. He had the seed available from the Soil Conservation Service Plant Materials Center on a trial basis. The Soil Conservation Service would furnish the seed if I would prepare a seedbed, fertilize, plant, and manage according to accepted management practices. I quickly agreed and the field was established in May 1971.

Management of the switchgrass consisted of annual applications of fertilizer and controlled grazing. Fertilizer was applied in mid May and grazing was limited to short periods when the grass reached 15 to 18 inch height. Grazing was discontinued when the grass was reduced to an 8 to 10 inch height. This management did not appear to work, as cool-season grasses invaded the field and the switchgrass thinned out. Our rainfall pattern is such that it favors production of cool-season plants so some control factors had to be applied. Early in the life of the stand, the plant population and general health of the stand was good and some chemical weed control was used. Billy Rountree, Plant Material Specialist with the Soil Conservation Service, on his annual management-evaluation tour suggested burning as a management tool. So had several other knowledgeable people. Yet I continued to resist and the stand gradually weakened. Some thought was given to plowing up the remaining grass, thinking it was not adapted to the soil conditions. Switchgrass likes a moderate, wet-natured soil. The puzzle just wasn't taking shape. Then early in 1977 I met Larry J. Houf, Upland Wildlife Biologist with the Missouri Department of Conservation. He also suggested burning; then he said, "I will be up Saturday to help you." The field was burned. Later I had the opportunity to meet and visit with Dr. Clenton E. Owensby, Associate Professor of Range Management, Kansas State University, and discussed his work with controlled burning. After careful study of information provided by Dr. Owensby and after several years of controlled burning of the switchgrass, I am a convert to this tool of management. The stand is growing stronger each year with fertilizer, controlled
grazing, and burning.

But the Blackwell switchgrass I tried was disappointing in that it matures rather early in the summer or about mid-July. That still leaves about 6 weeks of the midsummer slump left by cool-season grasses. So my search continued. The next break occurred in early 1973 when again Doyle Martin approached me with some caucasian bluestem seed from the Plant Material Center. Would I plant it? My first reaction was no because I didn’t have a place but I quickly changed my mind. Yes, I would plant it, but where? How about the old wheat field? It had long ago been converted to orchardgrass for hay and the stand was now thinning to where reseeding would be necessary but plowing for establishment to caucasian bluestem would create a tremendous potential for erosion. I did not want to risk that, since so much erosion had occurred in the past. I finally decided that orchardgrass hay would be harvested in mid-May. Immediately after harvest the bluestem seed would be sliced into the orchardgrass sod with a special planter borrowed from the SCS. The orchardgrass would then be sprayed with a selected herbicide. The idea was to duplicate no-till planting of corn and it worked.

In 1974 I was able to get some indiangrass seed from the Plant Material Center. However, the quality of the seed was rather low and I was advised to hold it over for a year in hopes germination would improve. The field was then seeded in May 1975. Weeds infested the field both in 1975 and 1976 and some thoughts again were given to plowing it up and starting over. Chemical weed control had not worked as well as hoped. Reluctance to given up and a pressing time schedule prevented me from going ahead with the idea. I burned the residue from the field in April 1977 and that seemed to turn things around. The cool-season weeds and grasses were killed back and the indiangrass really took off. By September there was an adequate stand of grass 6 to 7 feet tall. I burned the field again in April 1978 and overseeded Illinois Bundie Flower in the ash. The attempt did not prove successful.

In July 1981 I added a field of big bluestem to the forage system and plan to manage and evaluate it as I have the indiangrass and switchgrass.

The clump of grass growing tall and green in the midsummer heat remains etched in my memory. With these plantings the parts of the puzzle finally fit nicely together, and I have attained the hopes I envisioned on that hot July day many years ago.

The end result is that I have found no miracle grass. Rather I found several excellent grasses all with different characteristics fitting like building blocks and serving a particular need at different times of the year. This diversification gives me the quality of forage I need for year-round use, and evens out my pasture and hay program. I also feel the benefits I got in better beef production more than paid for the cost of establishing the grass.

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Grazing Lands Forum Established

Representatives of many organizations interested in America’s one billion acres of grazing lands meeting at Winrock International June 1-2 have established a Grazing Lands Forum. The Forum will lay groundwork in developing a national organization to address issues affecting this country’s grazing land resource.

Ron A. Michieli, a vice president of the National Cattlemen’s Association and executive secretary of the Public Lands Council, was elected chairman of the new group.

Evert Byington, Winrock International range ecologist and executive secretary of the new group, said establishment of the Grazing Lands Forum represents 2 years of work begun after passage of a resolution at the 1981 International Grasslands Conference urging that scientists and users find a vehicle for looking at America’s grazing lands as a total resource.

The Grazing Lands Forum will operate for 18 months, and during this time will establish a more permanent organization representing all concerned users of grazing lands. The major focus of the permanent organization will be on providing a reliable information base to inform the general public about the grazing lands resource, and aid policymakers in making informed decisions on matters affecting grazing lands, Michieli said.

Headquarters of the Grazing Lands Forum will be at Winrock International. The executive committee of the group consists of Michieli, Byington, Peter Jackson of the Society for Range Management, Walter Wedin of Iowa State University and the American Forage and Grasslands Council, and Dan Merkel of the USDA Extension Service.